Hamp + Return

US WEST

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Melissa Newman
Vice President - Regulatory Affairs

October 7, 1999

EX PARTE

Ms. Magalie Roman
Secretary
Federal Communications Commission
445 – 12th Street, SW, Room TW-A325
Washington, DC 20554

RE: Line Sharing

Dear Ms. Salas:

On Thursday, October 7, 1999, Bill Johnston, Bob McKenna, Barbara Brohl, Mary Retka and the undersigned, representing U S WEST, met with Jane Jackson, Dan Stockdale, Margaret Egler, Staci Pies, Vince Paladini, Carol Mattey and David Hunt of the Common Carrier Bureau, to discuss the above-referenced proceeding. The attached material was distributed at the meeting and served as the basis of the discussion.

In accordance with Section 1.1206(b)(2) of the Commission's rules, an original and one copy of this letter and attachment are being filed with your office for inclusion in the public record of this proceeding.

Acknowledgment and date of receipt of this submission are requested. A duplicate of this letter is attached for this purpose.

Sincerely,

Melissa Newman

Melissa Newman

Attachments

cc: Jane Jackson
Don Stockdale
Margaret Egler
Staci Pies
Vince Paladini
Carol Mattey
David Hunt

LINE SHARING—U S WEST EX PARTE PRESENTATION
October 7, 1999

The purpose of this presentation is to set forth the essential parameters of a workable solution to the "line sharing" issue. Assuming that line sharing is in the public interest, this paper addresses how can it be reasonably implemented.

This analysis is important, because much of the debate thus far seems to be based on the assumption that line sharing, once mandated, is both simple to implement and inexpensive. Neither of these assumptions are true. However, proper attention to details in putting together a line sharing structure can go a long way towards devising line sharing rules which are attentive to the Commission's desires and do not impose unnecessary or unmanageable burdens on ILECs or the public.

The professed purpose of line sharing is to permit a CLEC and an ILEC to share the efficiencies of new loop technology by simultaneously providing their respective services over a single loop. It is not a right to purchase a full loop and pay for less than the value of the loop. Nor is it the right to a discounted loop even if it is not shared. It is a matter of shared efficiency which permits multiple service delivery to a customer of competitive services. This is the public interest basis for line sharing. Because much confusion seems to have arisen out of a failure to grasp this concept, we start with the conceptual parameters of line sharing, and then examine individual aspects of a line sharing regulatory regime.

1. Definitional and technology issues. Line sharing is limited to an actual use of a shared line.

- This is a critical distinction. A CLEC should not be able to demand the right to pay a discounted rate for a loop which is not also being used by someone else.
- The mere fact that a line could be shared with someone else is not a sufficient predicate upon which to base mandatory line sharing. Line sharing is based on sharing operational efficiencies. If these efficiencies are not being realized in a particular case, an entire unbundled loop is being utilized by the CLEC and must be paid for. This is true even if the CLEC is not using all of the capacity (actual or potential) within a loop. In other words, a CLEC cannot demand the right to a discounted loop based simply on the fact that it might be shared, actually or potentially. The loop must actually be shared for any discounts to apply.
- In the case of technologies which do not permit line sharing (e.g., technologies which digitize an entire loop such as IDSL), line sharing cannot be implemented and discounts from the TELRIC loop rate are not available.
- There are vital legal interests which dictate the above conclusions.
- Note, as technology is moving towards an all digital environment, line sharing is a transitional mechanism which can be implemented only with very specific technology which will ultimately be phased out. Alternate approaches may be better and less

difficult and costly to implement. U S WEST discusses a compromise proposal for what we call "virtual line sharing" below.

- This said, we agree that, if a CLEC and a customer agree that the CLEC should be granted the ability to share the loop with the U S WEST voice service, U S WEST would not be able to insist that the CLEC take instead a spare second loop and pay for an entire unbundled loop.

Other Technical issues

- U S WEST must control the POTS splitter.
  - Cannot give up control of voice service.
- Splitter efficiency
  - Cost
  - Space issues
  - Power issues
  - See attachments
- Timing
  - Power spectral density masks not approved until 2Q2000
  - Network reliability issues should be run through the NIIF
  - See attachments
- Definition
  - Line sharing is the joint and simultaneous use of local loop by two or more provider of telecommunications service

2. QSS and network cost issues. Costs of implementing line sharing must be recovered.

- Costs of implementing line sharing are substantial.

Equipment (external splitters, cross connects, etc.)

  - Systems
  - These are expenses which would not be otherwise incurred.
  - Quick transitional time—line sharing is an ephemeral phenomenon
- Costs must be recovered.
  - From line sharing customers.
  - From federal treasury.
  - From explicit non-avoidable funding.
- See attachment for details.

3. COVAD's September 30th proposal is not reasonable

- No definition of line sharing. COVAD really does not define what line sharing is in its proposed rule would contribute.
- COVAD likewise does not suggest any technological parameters which should drive line sharing.
- COVAD's proposal does not take into account of line sharing cost recovery.
- COVAD seems to be seeking a simple 90% discount on unbundled loops, whether or not a line is shared.

4. Pricing issues

The price of a shared unbundled loop should be divided equally, with the CLEC paying 50% of the unbundled loop UNE price.

- All proposed allocators of the cost of a portion of an unbundled loop are generally gross estimates.
- Bandwidth does not work. In cable cost allocation proceeding, some parties suggested that this method of allocation of loop costs could exceed 95% assignment to the CLEC.
- COVAD's proposal does not work. A 90% discount, such as proposed by COVAD, is simply not reasonable, and no facts or analysis support it.
- 50% is a reasonable compromise.

Imputation of loop costs to ILEC DSL offerings should be avoided.

- An ILEC's ability to offer voice and data over a single loop is simply a matter of technological efficiency. Giving a CLEC the ability to share in some of this efficiency without offering voice service does not necessitate forcing the ILEC to forego its own efficiency benefits as part of line sharing.
- A CLEC does have the opportunity to combine voice and data over a single loop that the ILEC possesses if it chooses to do so. The choice to avoid providing universal voice service (or other voice service, for that matter) is a decision of the CLEC. Should a CLEC choose to provide voice service as well as data service, thus utilizing the efficiencies which permit line sharing in the first place, the CLEC will be able to assign loop costs in any manner it chooses subject to proper accounting.
- An imputation of extra loop costs designed to raise customer prices for ILEC DSL service would not be in the public interest. This seems to be one of the proposals of the Coalition.
- Imputation of a portion of the loop costs to an ILEC's DSL service would result in reducing the ILEC's voice service costs to a particular customer when that customer purchased the DSL service of either the ILEC or one of a CLEC. However, the systems required to accomplish this result (different local exchange prices based on the existence of a DSL service) would be astronomical. The FCC doesn't have the jurisdiction to control local exchange prices in any event, at least not in the absence of preemptive action under Section 253 of the Act.
- Best way to address imputation—simply leave it alone.

5. Compromise approach—Virtual" line sharing.

- See attachment

6. Technical issues.

- Serious questions remain as to how line sharing will actually work in practice.
- U S WEST is embarking on a technical trial in Minnesota
- See attachments on trial

UNBUNDLED LOOP CONFIGURATION

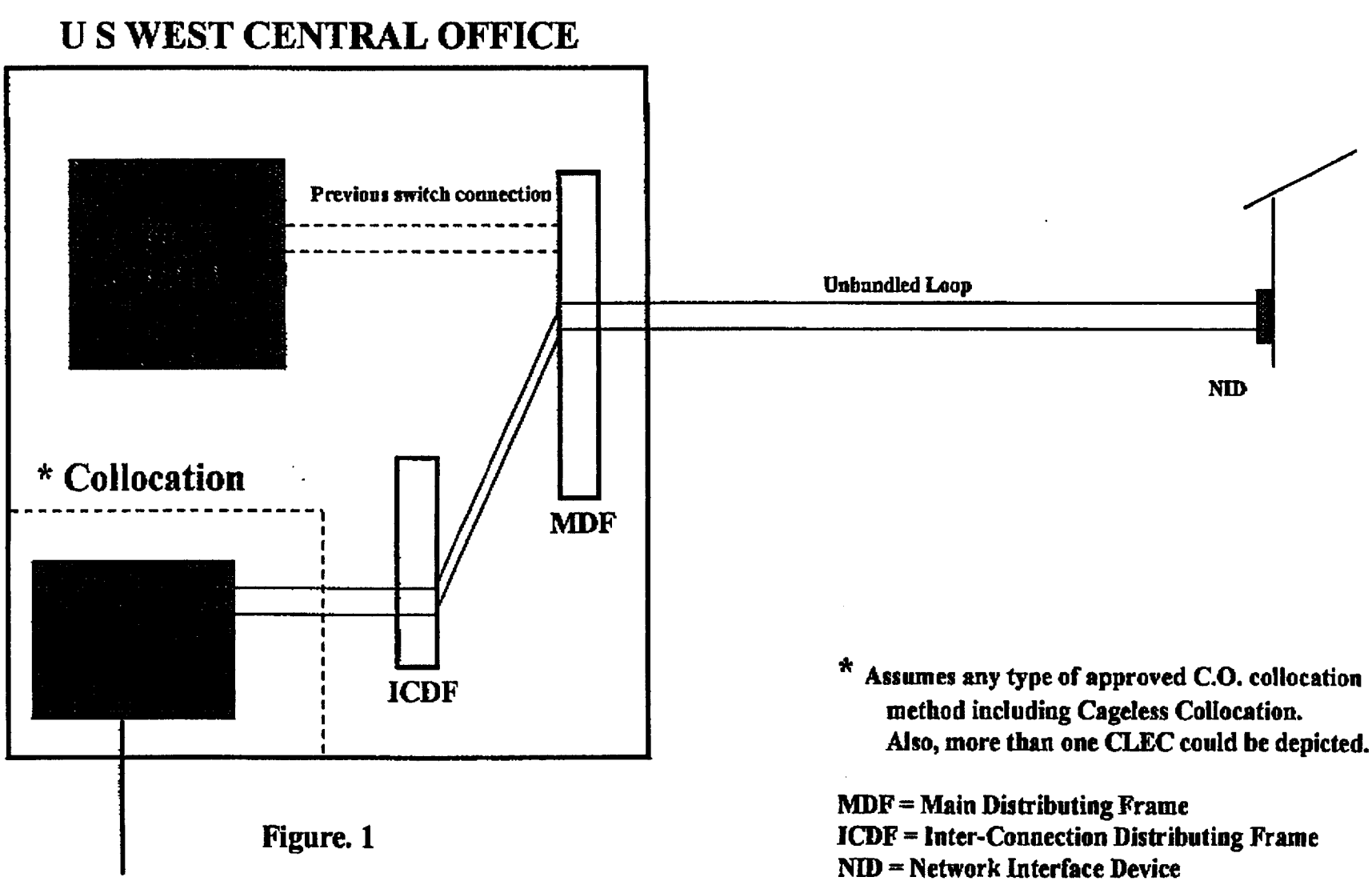

Figure. 1

* Assumes any type of approved C.O. collocation method including Cageless Collocation. Also, more than one CLEC could be depicted.

MDF = Main Distributing Frame
ICDF = Inter-Connection Distributing Frame
NID = Network Interface Device

UNBUNDLED LOOPS with DSLAM COLLO

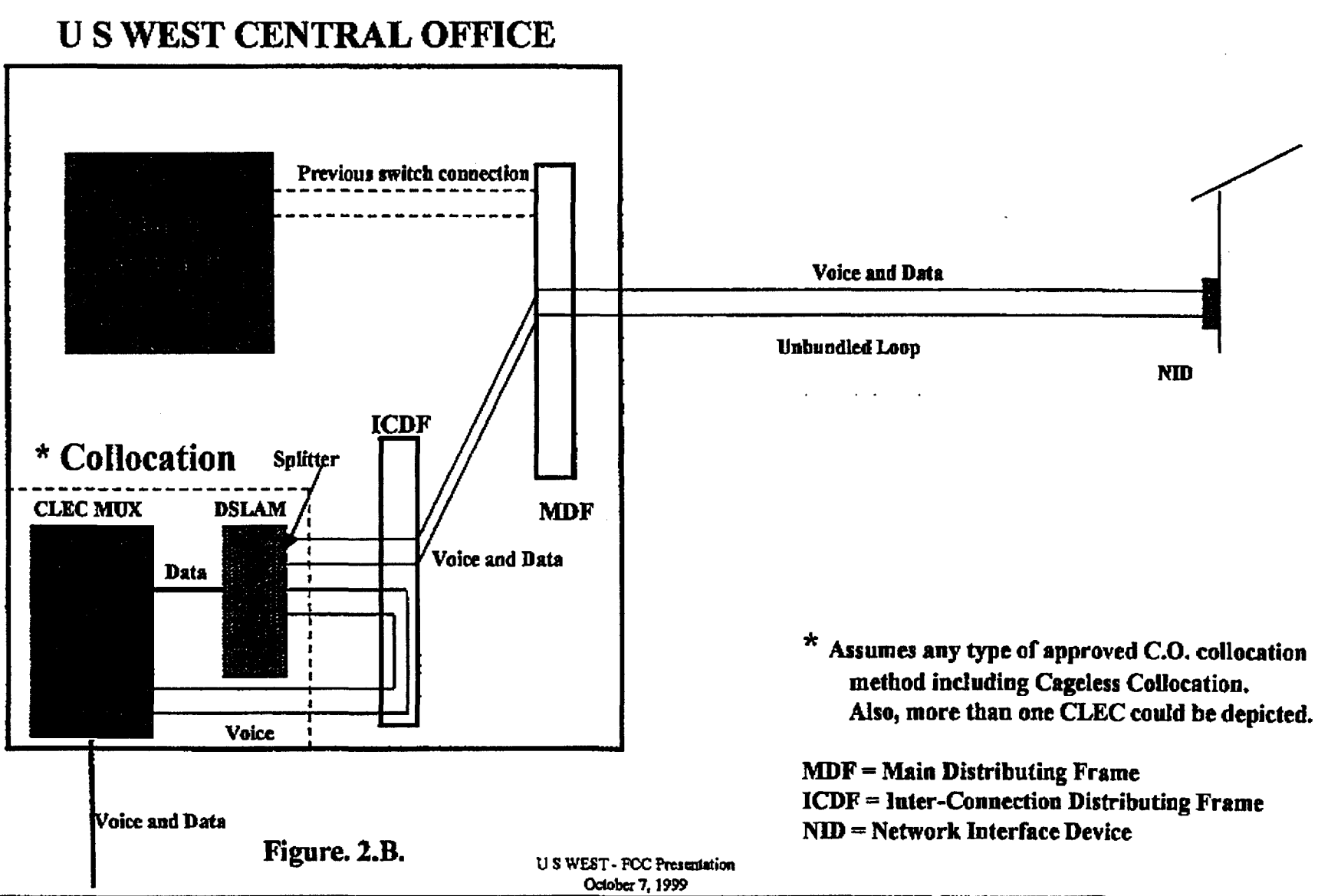

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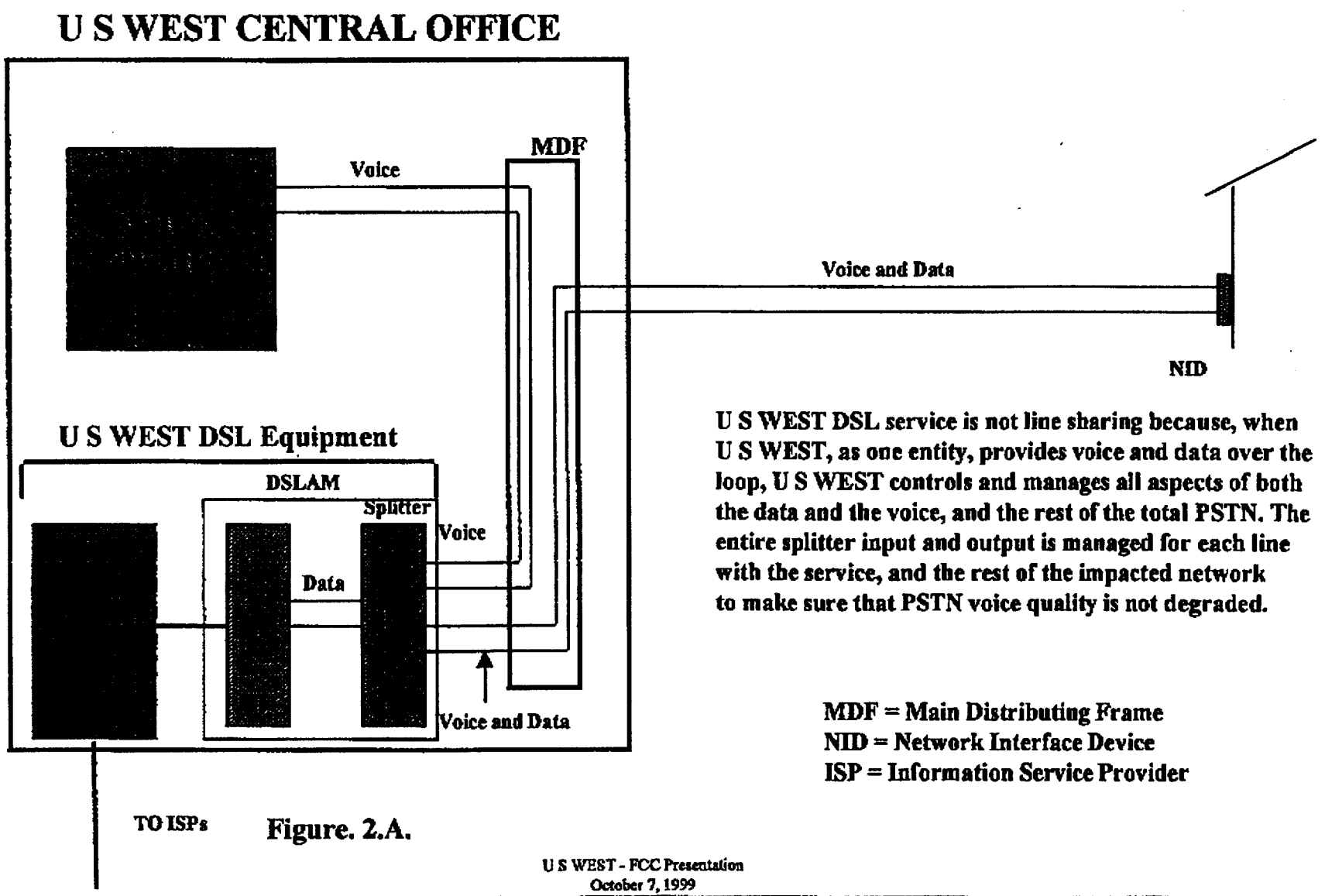
Figure. 2.B.

U S WEST DSL SERVICE



U S WEST DSL service is not line sharing because, when U S WEST, as one entity, provides voice and data over the loop, U S WEST controls and manages all aspects of both the data and the voice, and the rest of the total PSTN. The entire splitter input and output is managed for each line with the service, and the rest of the impacted network to make sure that PSTN voice quality is not degraded.

MDF = Main Distributing Frame
NID = Network Interface Device
ISP = Information Service Provider

Figure. 2.A.

UNBUNDLED LOOPS with DSLAM COLLO with LINE SHARING and DLEC SPLITTER

U S WEST CENTRAL OFFICE

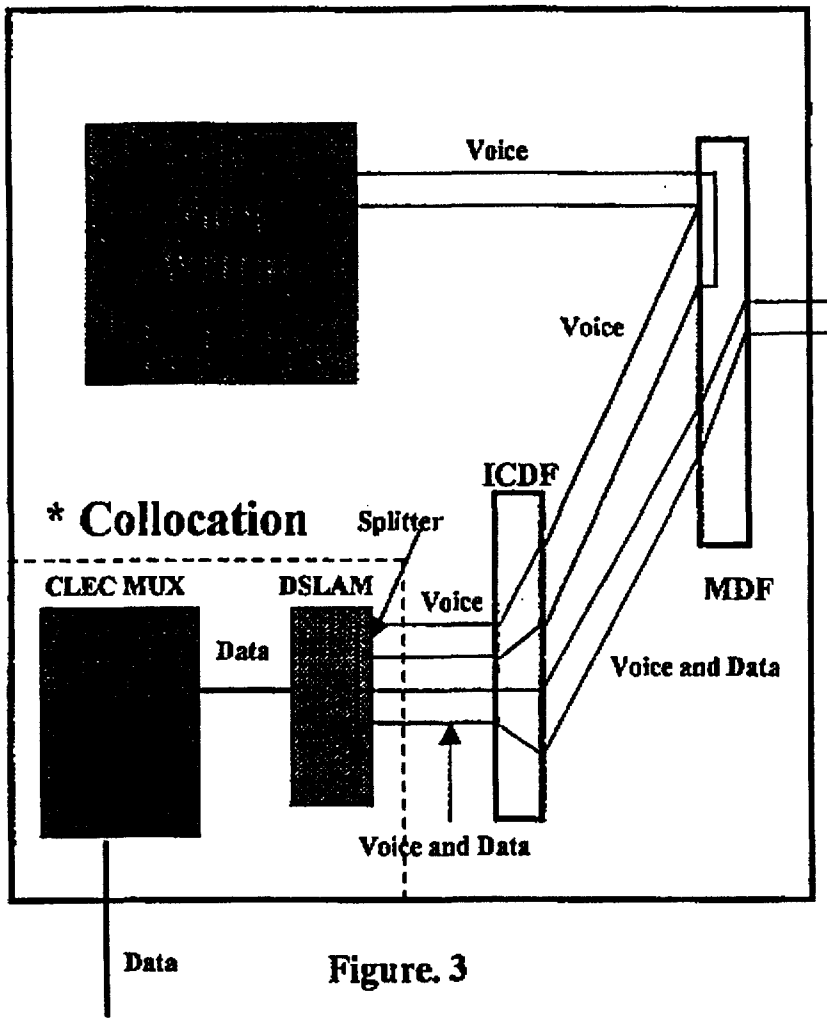
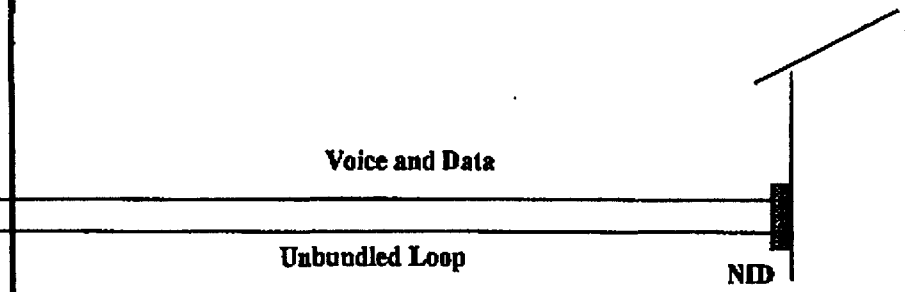


Figure. 3



U S WEST has no access to, or capability to manage, the splitter. The PSTN voice quality is not in U S WEST's control. Also, if there is noise on the loop, the local and toll quality of the voice will be degraded. U S WEST is held to a quality of service standard for interLATA toll. A line sharing order could require U S WEST to amend its toll tariffs for where line sharing exists.

* **Assumes any type of approved C.O. collocation method including Cageless Collocation. Also, more than one CLEC could be depicted.**

MDF = Main Distributing Frame
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UNBUNDLED LOOPS with DSLAM COLLO with LINE SHARING and U S WEST SPLITTER

U S WEST CENTRAL OFFICE

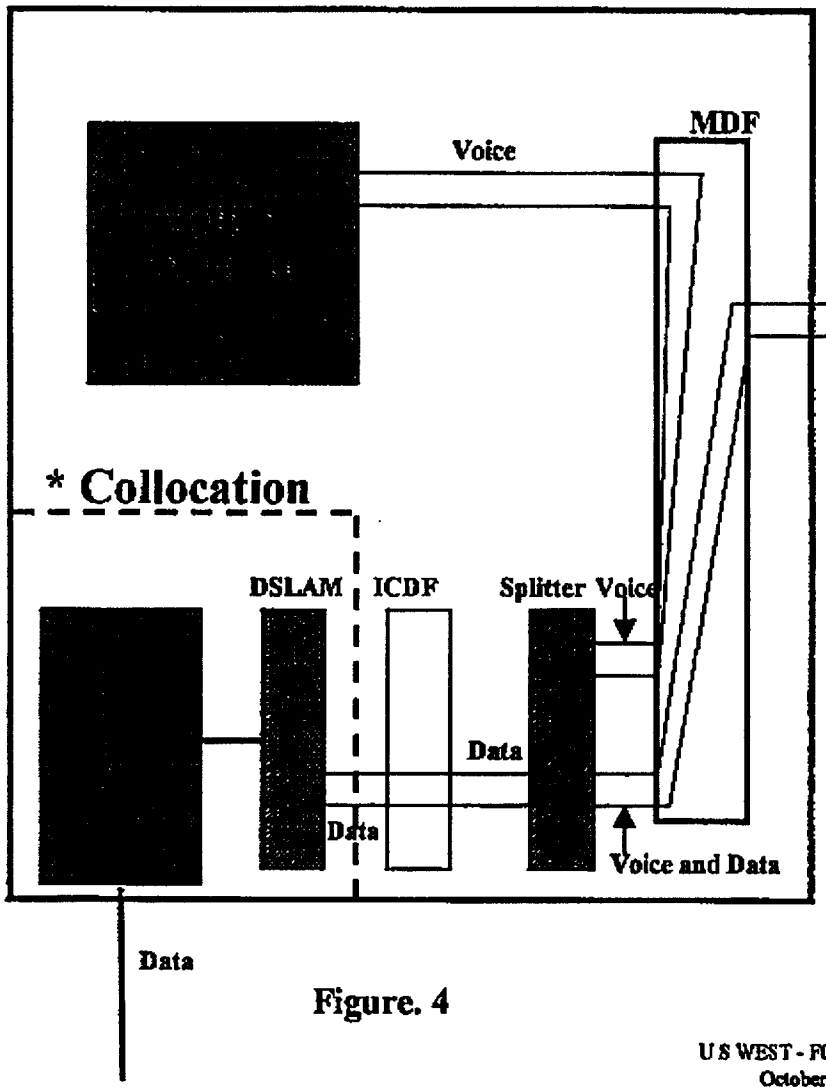

Figure. 4

This configuration assumes a change from an integrated splitter in the DSLAM to a stand alone splitter as a shared element, managed by U S WEST.
Splitter Cost Estimated at $47.00 Per Line based on equipment first cost only. See attachment for all costs.

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MDF = Main Distributing Frame
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U S WEST VIRTUAL LINE SHARING COMPROMISE PROPOSAL

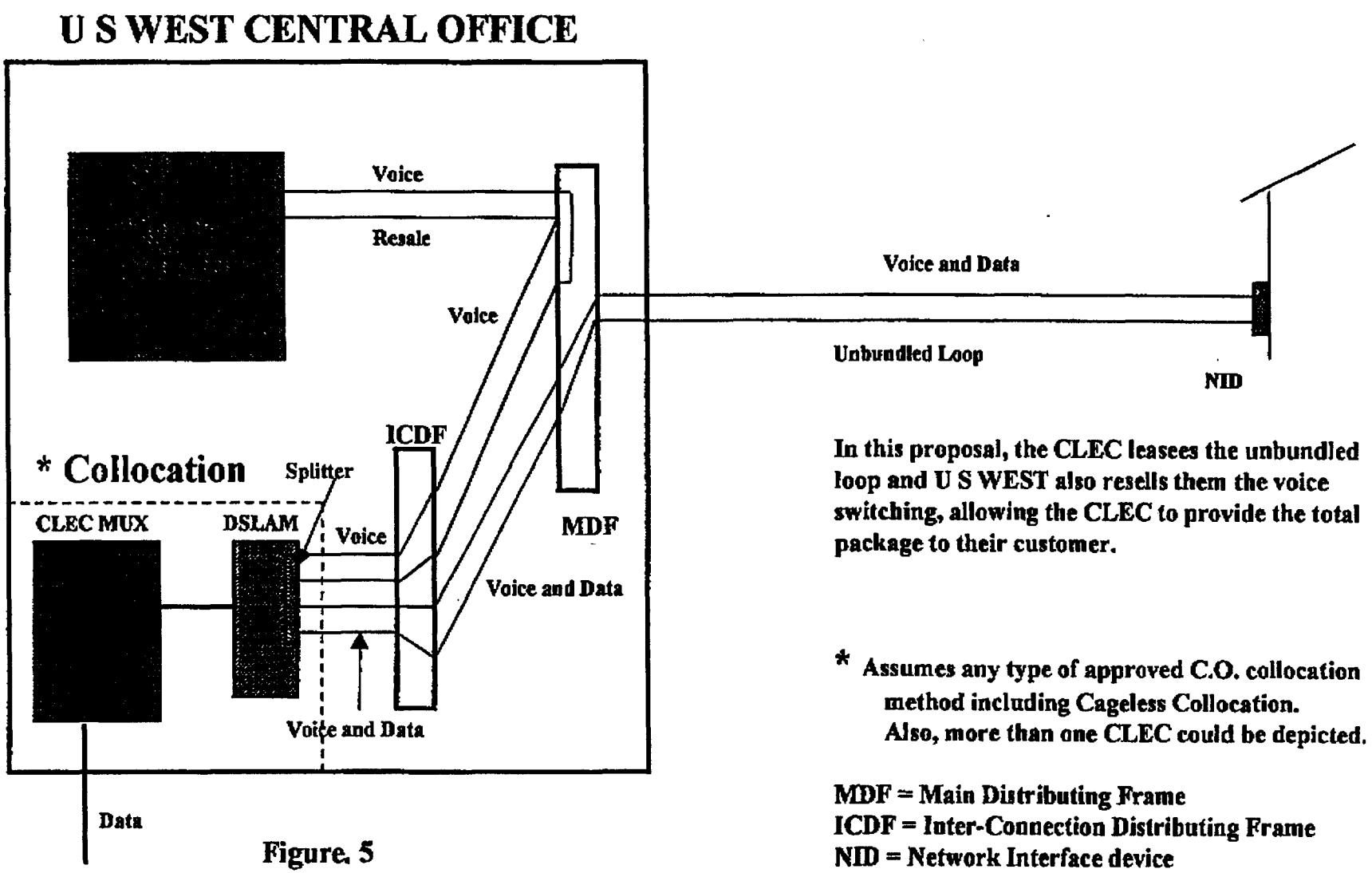

Figure. 5

In this proposal, the CLEC leasees the unbundled loop and U S WEST also resells them the voice switching, allowing the CLEC to provide the total package to their customer.

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MDF = Main Distributing Frame
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Line Sharing Equipment Costs

DLEC comments indicate a desire to require placement of an external splitter in the central office to facilitate line sharing.

Issues:

This is counter to the direction of technology toward integrated splitter functionality. Additionally, provision of enough splitters for an average central office of 30,000 lines would take up 540 square feet of space which could be used for collocation.

This will also drive up power use, HVAC use, and racking requirements.

Costs:

The costs to place external splitter in the Central Office are:

Splitter cost	$47.00 per line
Labor cost	$33.48 per line
Terminations	$ 8.16 per line

Spectrum Management Standards Work

Completed Work:

July, 1999 - The T1E1.4 Spectrum Management document was released for vote and technical comments.

The Ballot passed, however, technical comments require resolution prior to final approval.

September, 1999 - The comment resolution process begins.

Planned Work:

October, 1999 - Work on the comments continues with disagreement on cross talk interference levels, deployment restrictions,and "guarded systems".

December 1999 - Final resolution to technical comments is expected.

February, 2000 - The second ballot will be sent out.

Second Quarter, 2000 - The document is expected to be submitted for approval.

NATIONAL INTERCONNECTION & INTEROPERABILITY FORUM

The National Interconnection and Interoperability Forum (NIIF) is a forum under the Alliance for Telecommunications Industry Solutions (ATIS). It is a source for industry solutions to network reliability issues. NIIF is open to all telecommunications companies. This forum has been used to resolve issues in the past, and continues to be used to identify the industry standards.

This existing industry forum is where the network reliability issues associated with line sharing should be worked. In fact, carriers are already bringing their issues to NIIF. For example, NIIF has received a request to identify the availability of ILEC xDSL capable loops:

- **in real time**
- **with defined loop characteristics including:**
  - **Digital loop carrier**
  - **Cable length**
  - **Cable design/gauge**
  - **Bridged Tap information**
  - **Load coil information**

The NIIF was asked to establish a standard and a process for creating this information and disseminating it to the industry.

Spectrum Unbundling (Line Sharing)

Barbara Brohl

U S WEST

October 7, 1999

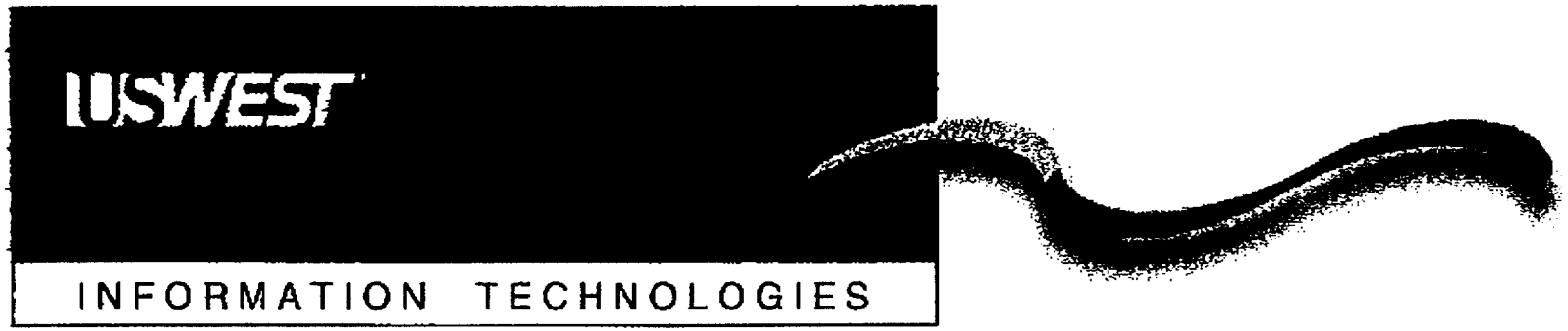
US WEST

INFORMATION TECHNOLOGIES

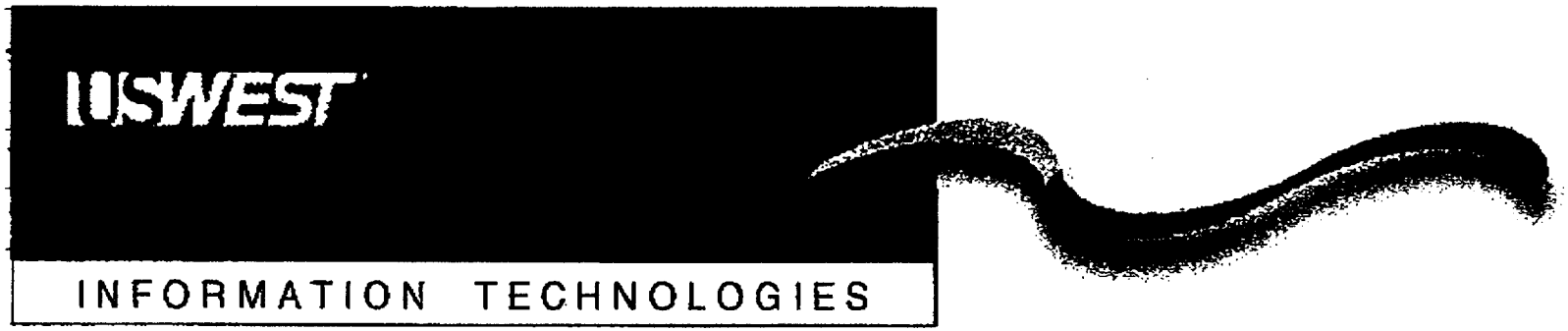
Purpose

To Discuss:

- **U S WEST's Operational Support Systems**
- **Current Processing Flow**
- **Processing Flow with Line Sharing and the Changes Needed to Support it.**
- **Assumptions and Risks**
- **Estimated Costs**



U S WEST's Operational Support Systems



OSSs & Electronic Interfaces

OSSs

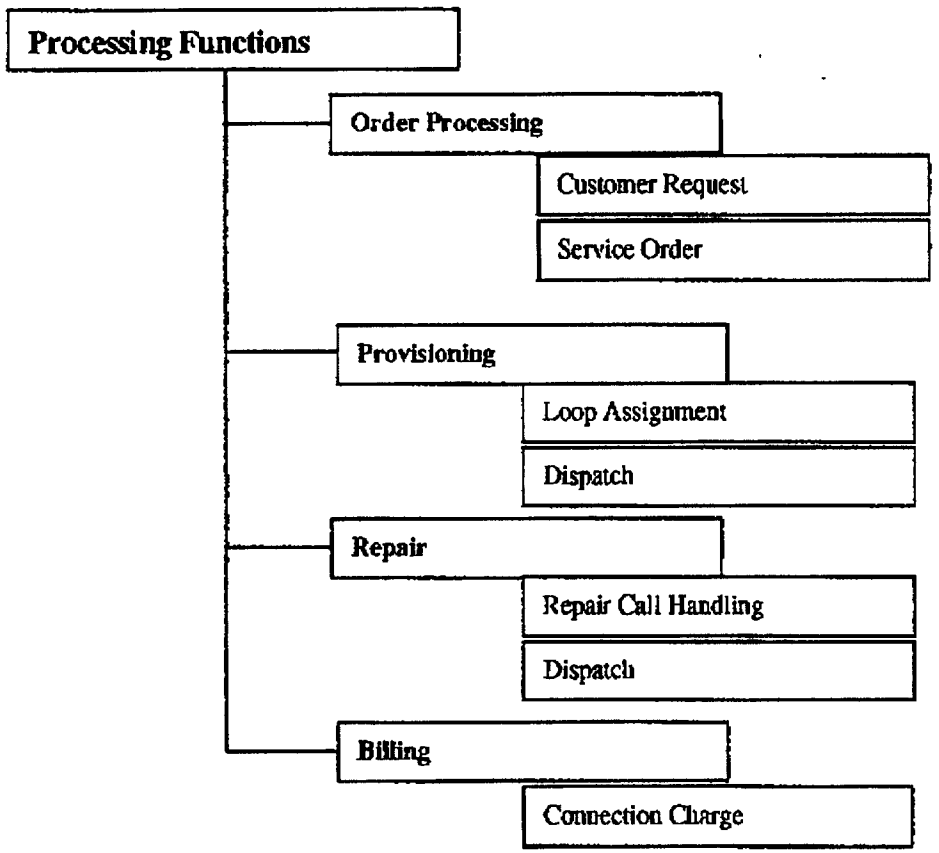
Downstream systems that perform:

- Ordering
- Provisioning
- Repairing
- Billing functions

Electronic Interfaces

Provide electronic access to OSSs:

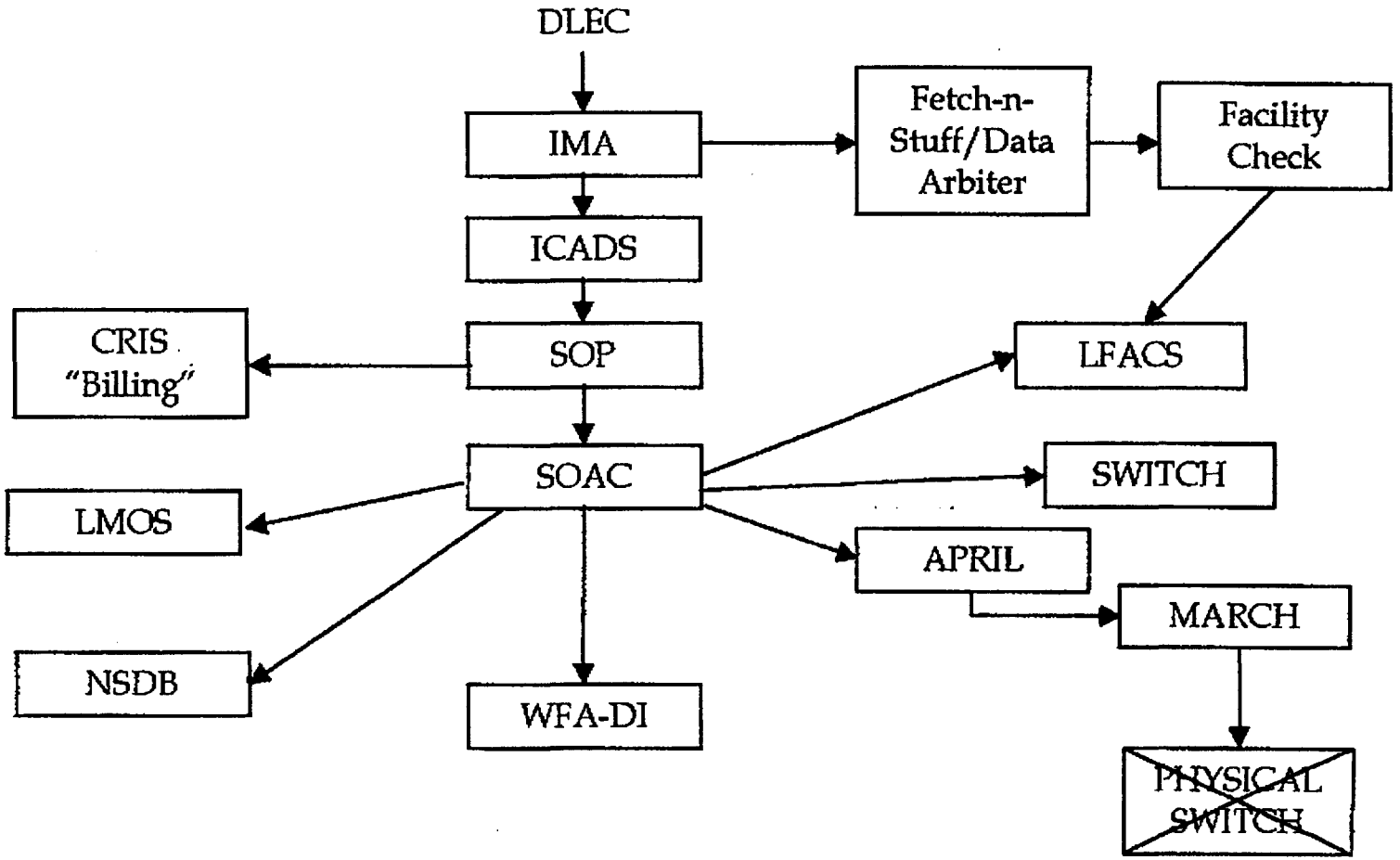
- IMA GUI
- EDI
- EB-TA



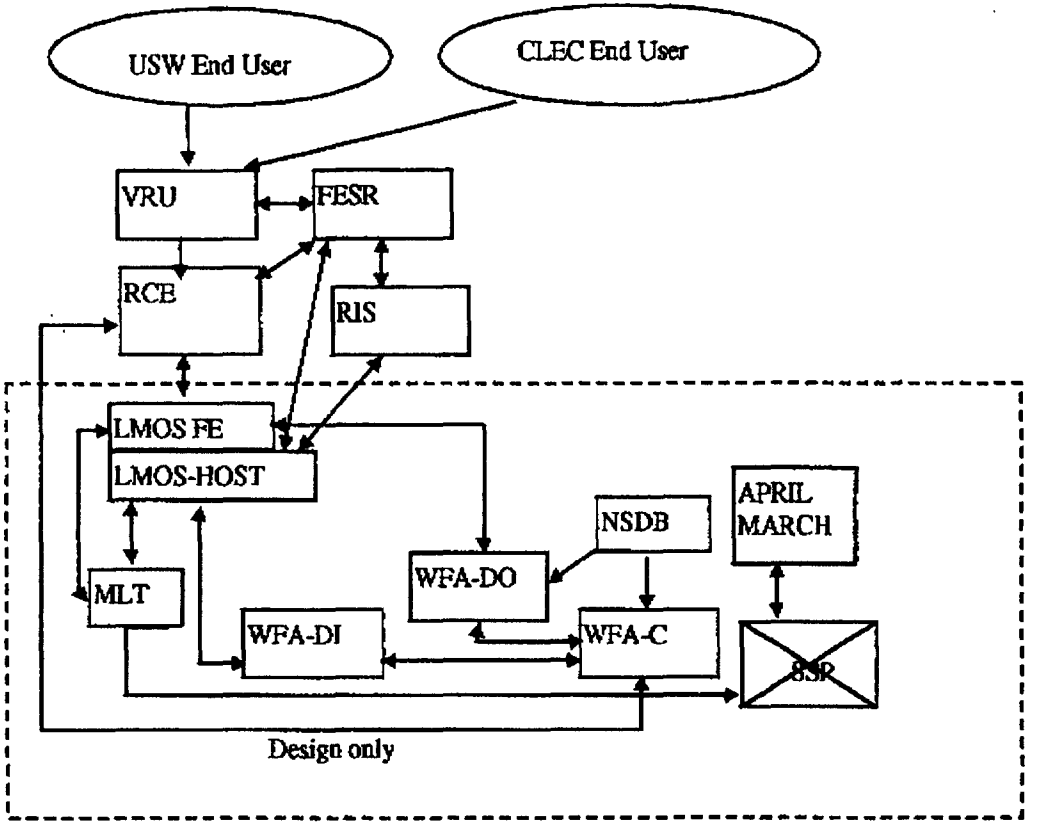
US WEST

INFORMATION TECHNOLOGIES

Ordering and Provisioning Flow



Repair System Flow



= Generally Designates Repair System

Repair May Go Through Either the POTS or Designed Flow